



## PLASMA DISPLAY TV

Chassis : D65C(P)Europe\_Rev.1

Model : PS42D4SX/BWT

# ***SERVICE*** *Manual*

### PLASMA DISPLAY TV



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# 1. Specifications

MODEL		PS-42D4S/PS-42V4S
Screen Size		107 Cm / 42 Inches(16:9)
Dimensions	Display	1028[W] X 86.4[D] X 632.5[H] mm
	Remote Control	55[W] X 21[D] X 160[H] mm
Weight	Display	30kg[without stand]
	Remote Control	110g[including batteries]
Voltage		100-240V~, 50 / 60Hz
Power Consumption		330W
Number of Pixels		852[H] x 480[V]
ANTENNA input		VHF, UHF[75 $\Omega$ unbalanced]
VIDEO Input		Ext.1(Scart)
		Ext.2(Scart)
		AV
		S-VIDEO
		COMPONENT [480i,p / 576i,p / 720p / 1080i]
		RGB[PC DSUB 15P] (D4 ONLY)
		DVI
AUDIO Input		Ext.1(Scart)
		Ext.2(Scart)
		AV / S-VIDEO
		COMPONENT
		PC(D4 ONLY)
		DVI
Output		VIDEO, AUDIO[L / R]
Speaker Output		15W + 15W[8 $\Omega$ ]
Accessory		Remote Control, AAA batteries, Power Cord
		Antenna Cable, Owner's Instructions
		Ferrite Core, Speaker Cable

# MEMO

## 2. Alignment and Adjustments

### 2-1 Service Mode

#### 2-1-1 SERVICE MODE Entry Method (General Transmitter)

- Using the Customer Remote
1. Turn the power off and set to stand-by mode.
  2. Press the remote buttons in this order; POWER OFF-INFO-MENU-MUTE-POWER ON to turn the set on.
  3. The set turns on and enters service mode.
- Using the Factory Remote
1. Turn the power on.
  2. Press the remote buttons in this order : Display-Factory.
  3. The set enters service mode.
- \* If you fail to enter service mode, repeat steps 1 and 2 above.

#### 2-1-2 Initial SERVICE MODE DISPLAY State

##### 2-1-2(A) OSD DISPLAY









###### Factory Mode

- 01. Picture Improvement
- 02. Initial Setting
- 03. PIP/TTX/Test Pattern
- 04. Option-1
- 05. Option-2
- 06. Reset


Release : 2004-05-20-16:30  
Version : T-NELPCI-1029

###### Current Input Mode



-  Indicates selected input mode
-  Picture Adjustment
-  Setting the Initial Values
-  Setting the Special Features
-  Options-1 : Particulars Product Options
-  Options-2 : PDP Properties Options
-  Initializing after saving the adjustments
-  Software Version Information

##### 2-1-2(B) Button Operations in SERVICE MODE

Menu	Displays all menus
UP/DOWN	Cursor moves to select items
LEFT/RIGHT	To increase and decrease the data of the selected items
 (ENTER)	Confirm your choice(Store OR Enter)
TV/VIDEO Button	Change input source

\* While in Tuner mode, the direct access buttons can be used to select and change channels.

## 2-2 WHITE Balance Coordinates

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### 2-2-1 PS42D4S/PS42V4S White Balance Adjustment

1. W/B Adjustment is required for the following six modes :

DVI -> Component(720p) -> Component(1080i) -> PC -> VIDEO (Video port) -> VIDEO (Graphic port)

2. Adjustment Method (Signal equipment : MSPG-925LTH, Measurement equipment : CA210)

#### ■ MSPG-925LTH

Equipment that outputs analog and digital signals simultaneously

(Analog / Digital signal output / TV signal output (S-Video included) / HDTV signal output)

- Digital Serial : TMDS (DVI24, Si1160) + DVI-I (Analog, Digital)

- Monitor Signal (Analog): R, G, B, HS, VS, CS

- TV Signal(CVBS) : NTSC M, NTSC J (7.5 IRE On/Off) (BNC or RCA), PAL B, D, G, H, I, PAL M, Nc

- D-TV Signal (1080i, 720p, 480p)

♣ MSPG-925 is used to adjust the W/B.

#### ■ CA210 : Color Analyzers adjusting brightness, chromaticity and etc.

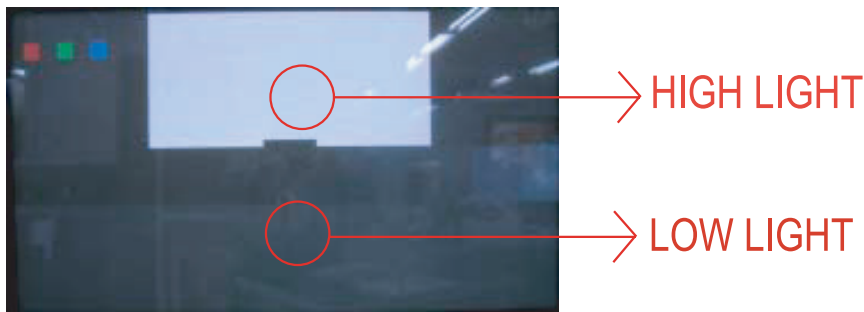
- R.G.B monochrome correction, brightness and gamma character adjustment

- White Balance and flickering measurement

(a) DVI

1) Input Toshiba Pattern at 720p resolution using MSPG-925LTH (model:#6, pattern:#16).

2) These are the point of measurement using CA210.



3) Press "POWER OFF-INFO-MENU-MUTE-POWER ON" to enter the factory mode.

4) Select "01.Picture Improvement" -> "01.White Balance"

5) Keep the value of Y as adjusting "07.Sub Contrast(for HIGH)" & "08.Sub Brightness(for LOW) ".

6) Keep the coordinate value of x and y as adjusting the value of R,G,B.

Adjust the coordinate x as the value of Red, and the coordinate y as the value of Blue.

<※ Generally, the value of Green is fixed.>

- Adjust the value of "Drive(01~03)" as the high point and the value of "Cutoff(04~06)" as low point.

※ Auto Color

- Must be executed in Component/PC before adjusting White Balance.

1) Input Auto Color Pattern with MSPG-925LTH(model:#6, pattern:#21).



2) Press "POWER OFF-INFO-MENU-MUTE-POWER ON" to enter the factory mode.

3) Select "01.Picture Improvement" ;æ "01.White Balance" -> "15.Auto Color" and Select "Off" -> "On"

4) It takes a few seconds to execute it.

(b) Component

1) Execute Auto Color in the method described above.

2) Input Toshiba Pattern at 720p resolution (model:#6, pattern:#16).

3) Select "01.Picture Improvement" -> "01.White Balance".

4) Adjust White Balance by selecting and adjusting Items 01. - 08. as performed in DVI mode.

5) Change input to Toshiba Pattern at 1080i resolution (model:#5, pattern:#16).

6) Adjust White Balance by selecting and adjusting Items 01. - 08. as performed in DVI mode.

(c) PC

1) Execute Auto Color in the method described above.

2) Input Toshiba Pattern at 800 x 600 (model:#16, pattern:#16).

3) Select "01.Picture Improvement" -> "01.White Balance".

4) Adjust White Balance by selecting and adjusting Items 01 - 08 as performed in DVI mode.

(d) Video

The video signal uses the video port when there is no other input signal.

However, signal uses the graphic port in PIP mode, which includes other input signals (PC, DVI, Component, etc.), Video adjustment should be performed with Video port and Graphic port separately.

1) Input Toshiba Pattern to Video Input (model:#2, pattern:#16).

2) Select "04.Option-1" -> "10.Video Port."

3) Set "10. Video Port" equal to "Video".

4) At Main SVC Menu, select "01.Picture Improvement" -> "01.White Balance."

5) Adjust Items 01 - 08 as performed in DVI mode.

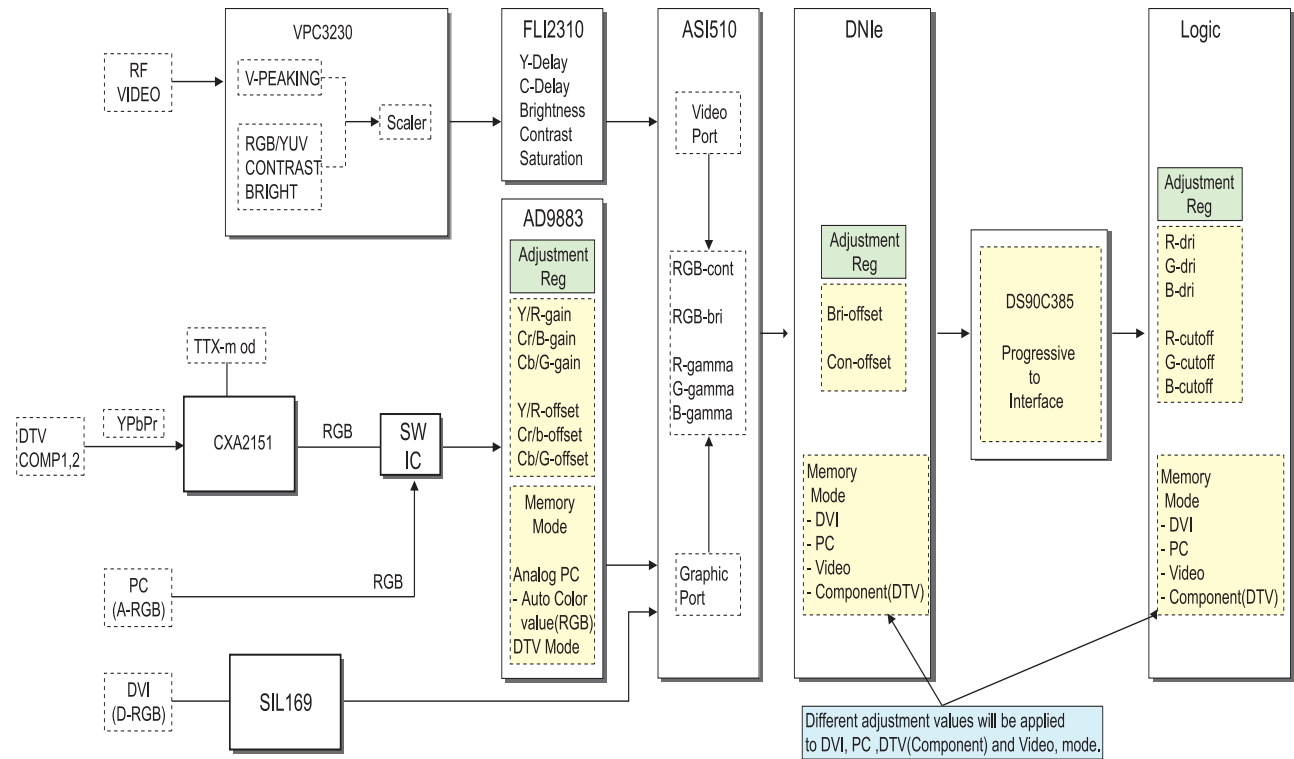
6) Return to Main SVC menu and select "04.Option-1" -> "10.Video Port."

7) Set "10. Video Port" equal to "Graphic".

8) At Main SVC Menu, select "01.Picture Improvement" -> "01.White Balance".

9) Adjust Items 01 -> 08 as performed in DVI Mode.

\* Thus, Micom saves the W/B data separately for each memory mode of the block (See the block diagram given below) during W/B adjustment.



## 2-2-2 White Balance Coordinates by Mode(Europe)

		VIDEO	Component	PC(D4 ONLY)	DVI
H/L	x	285	285	278	280
	y	295	295	285	295
	Y(fL)	36	31	38	36
L/L	x	285	285	280	280
	y	295	295	295	295
	Y(fL)	0.6	0.7	0.6	1.8



## 2-3 Factory Data

### 2-3-1 Factory OSD Main Menu

#### Factory Mode

- 01. Picture Improvement
- 02. Initial Setting
- 03. PIP/TTX/Test Pattern
- 04. Option-1
- 05. Option-2
- 06. Reset

Release : 2004-05-20-16:30  
Version : T-NELPCI-1029

#### Current Input Mode



- Indicates selected input mode
- Picture Adjustment
- Setting the Initial Values
- Setting the Special Features
- Setting PDP Properties Options
- Setting PDP Properties Options
- Initializing after saving the adjustments
- Software Version Information

### 01. Picture Improve

#### 01. Picture Improvement

- 01. White Balance
- 02. Color
- 03. Cont/Bri Enhancement
- 04. Detail Enhancement
- 05. Y/C Delay
- 06. Motion
- 07. DNle
- 08. Logic
- 09. Picture Size

#### Current Input Mode



- White Balance Adjustment
- Color Adjustment
- Contrast & Brightness Enhancement
- Detail Enhancement Sharpness Adjustment
- Y/C Delay Setting according to the System and Input Modes
- Motion Enhancing Adjustment
- DNle Registers
- Logic Registers of the Panel
- Picture Size Registers

**01.Picture Improve => 01.White Balance Adjustment**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
01.White Balance	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.R Drive	140	Logic	140	140	140	140
02.G Drive	130		130	130	130	130
03.B Drive	120		120	120	120	120
04.R Cutoff	128		128	128	128	128
05.G Cutoff	128		128	128	128	128
06.B Cutoff	128		128	128	128	128
07.Sub Contrast	37	DNle	37	37	37	37
08.Sub Brightness	54		54	54	54	54
09.R Gain	142	AD9883	X	128	128	X
10.G Gain	142		X	150	128	X
11.B Gain	142		X	128	128	X
12.R/Cr Offset	60		X	60	60	X
13.G/Y Offset	48		X	48	48	X
14.B/Cb Offset	64		X	64	64	X
15.Auto color	on/off		X	O	O	X
♣ Input modes require respective storing the changes after adjustment.						

01~06 : Logic  
07~08 : DNle  
09~15 : AD9883

**01.Picture Improve => 02.Color Adjustment**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
02.Color	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.Saturation	129	VPC3230	129	x	x	x
02.Tint	32		32	x	x	x
03.RGB/YUV U-SAT	35		35	x	x	x
04.RGB/YUV V-SAT	37		37	x	x	x
05.RGB/YUV Tint	0		0	x	x	x
06.FLI-saturation	130	FLI2310	130	x	x	x
07.R Gamma	32	ASI510	30	32	32	32
08.G Gamma	32		30	32	32	32
09.B Gamma	32		30	32	32	32
10.Gain-Sel	1	CXA2151Q	x	1	x	x
11.Cr Gain	7		x	7	x	x
12.Cb Gain	7		x	7	x	x
13.Y Gain	1		x	1	x	x
14. FLI-Y/G Bir	0	FLI2310	0	x	x	x
15. FLI-Cr/R Bir	9		9	x	x	x
16. FLI-Cb/B Bir	7		7	x	x	x

01 ~05 : VPC3230

07~09 : ASI510

06 : FLI2310

10~13 : CXA2151

14~16 : FLI2310

**01.Picture Improve => 03.Contrast & Brightness Enhancement**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
03.Cont/Bri Enhancement	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.Contrast	40	VPC3230	40	x	x	x
02.Brightness	27		27	x	x	x
03.RGB/YUV Contrast	28		28	x	x	x
04.RGB/YUV Brightness	67		67	x	x	x
05.FLI-Contrast	128	FLI2310	128	x	x	x
06.FLI-Brightness	128		128	x	x	x
07.R Contrast	32	ASI510	32	32	32	32
08.G Contrast	32		32	32	32	32
09.B Contrast	32		32	32	32	32
10.R Brightness	0		0	0	0	0
11.G Brightness	0		0	0	0	0
12.B Brightness	0		0	0	0	0

01~04 : VPC3230

07~12 : ASI510

05~06 : FLI2310

**01.Picture Improve => 04.Detail Enhancement**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
04.Detail Enhancement	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.VAPGAIN	4	uPD64083	4	x	x	x
02.VAPINV	16		16	x	x	x
03.YPFT	3		3	x	x	x
04.YPFG	9		9	x	x	x
05.Peaking	3	VPC3230	3	x	x	x
06.Peaking Filter	2		2	x	x	x
07.Coring	0		0	x	x	x
08.HPLL_ERR_MIN	18		18	x	x	x
09.HPLL_ERR_MAX	80		80	x	x	x
10.V_SLICER	0		0	x	x	x
11.HenhGain	64	FLi2310	64	x	x	x
12.HLEGain	64		64	x	x	x
13.HChrEnGain	32		32	x	x	x

01~04 : uPD64083

05~10 : VPC3230

11~13 : FLi2310

**01.Picture Improve => 05.Y/C Delay Setting according to the System and Input Modes**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
05.Y/C Delay	TV		Mode-1	Mode-2	Mode-3	Mode-4
01. PAL-B/G	255	VPC3230	255	x	x	x
02. PAL-D/K/L	254		254	x	x	x
03. PAL-I	254		254	x	x	x
04. SECAM-B/G	251		251	x	x	x
05. SECAM-D/K/L	250		250	x	x	x
06. NTSC	254		254	x	x	x
07. PAL-AV	254		254	x	x	x
08. SECAM-AV	252		252	x	x	x
09. NTSC-AV	254		254	x	x	x
10. RGB/YUV-Y	90		0	x	x	x
11. RGB/YUV-UV	90		0	x	x	x
12. FLI-Y	5	FLI2310	5	x	x	x
13. FLI-C	11		11	x	x	x

01~11 : VPC3230

12~13 : FLI2310

**01.Picture Improve => 06.Motion Enhancing Adjustment**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
06.Motion	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.HPLL Speed-1	2	VPC3230	2	x	x	x
02.Auto Lock	0		0	x	x	x
03.V-motion Tresh	42	FLI2310	42	x	x	x

01 ~ 02 : VPC3230

03 : FLI2310

**01.Picture Improve => 07.DNle Registers**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
07.DNle	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.SUB BRIGHT	54	DNle	54	54	54	54
02.SUB CONT	37		37	37	37	37
03.SCALE MAX	48		48	48	48	48
04.SCALE MIN	16		16	16	16	16
05.TH HPF	0		0	0	0	0
06.TH EDGE	4		4	4	4	4
07.NR SEL	2		2	2	2	2
08.CE UPPER	240		220	200	240	240
09.CE CUTOFF	32		32	32	32	32
10. CE GAIN	64		64	80	64	64
11. DCE GAIN	75		75	75	75	75
12. SKIN ON	0		0	0	0	0
13. CTI GAIN	0		0	0	0	0
14. DE NOISE GAIN	8		8	8	8	8
15. TH CORING	3		3	3	3	3
16. PATT SEL	0		0	0	0	0
17.DE NR	1		1	1	1	1
18. NOISE TH2	100		100	100	100	100
19. H CONT	63		63	63	63	63
20. V CONT	11		32	63	63	63
21. BLACK GAIN	2		11	6	2	2
22. WHITE GAIN	31		31	31	31	31
23. WTE GAIN	44		44	44	44	44
24. CTE GAIN	176		176	176	176	176

01~24 : DNle

**01.Picture Improve => 08.Logic Registers**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
08.Logic	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.R DRIVE	140	Logic	140	140	140	140
02.G DRIVE	130		130	130	130	130
03.B DRIVE	120		120	120	120	120
04.R CUTOFF	128		128	128	128	128
05.G CUTOFF	128		128	128	128	128
06.B CUTOFF	128		128	128	128	128
07.GAMMA	1		1	1	1	1
08.GTS SET	1		1	1	1	1
09.ERD MODE	2		2	2	2	2
10.RANDOM NOISE	0		0	0	0	0
11.DIFF FILTER	1		1	1	1	1
12.APC	1		1	1	1	1
13.APC SET	0		0	0	0	0
14.APC VALUE	127		127	127	127	127
15.ACTIVE VPOS	12		12	12	12	12
16.ACTIVE HPOS	19		19	19	19	19
17.VSYNC POS	3		3	3	3	3
18.HSYNC POS	32		32	32	32	32
19.VSYNC WIDTH	2		2	2	2	2
20.HSYNC WIDTH	12		12	12	12	12

01~20 : Logic



## 01.Picture Improve => 09.Picture Size Registers

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
09.Picture Size	TV		Mode-1	Mode-2	Mode-3	Mode-4
01. H START OFFSET	0	ASI510	0	0	0	0
02. V START OFFSET	0		0	0	0	0
03. H END OFFSET	0		0	0	0	0
04. V END OFFSET	0		0	0	0	0
05.OVERSCAN B	38		38	38	38	38
06.OVERSCAN G	38		38	38	38	38
07.OVERSCAN R	38		38	38	38	38

01~07 : ASI510

## 02.Setting the Initial Values

### 02.Initial Setting

- 01. Initial P-Mode
- 02. P-Mode Value
- 03. Initial Color Tone
- 04. Color Tone Value

### Current Input Mode



- ☞ Indicates selected input mode
- ☞ Reset after saving the P-Mode adjustments
- ☞ P-MODE the data Values
- ☞ Reset after saving the color tone adjustments
- ☞ Color tone the data Values

## 02.Initial Setting => 01.Initial P-Mode

### 01.Initial P-Mode Current Input Mode

- 01. Dynamic
- 02. Standard
- 03. Movie
- 04. Custom

Available options for the PC/DVI Mode are High,Middle, Low and Custom.

## 02.Initial Setting => 02.P-Mode Value

### 02. P-Mode Value

- 01. Dynamic
- 02. Standard
- 03. Movie
- 04. Custom

### Current Input Mode



Available options for the PC/DVI Mode are High,Middle, Low and Custom.

## 02.Initial Setting => 02.P-Mode Value => 01.Dynamic

01.Dynamic	Current Input Mode
01. Contrast	◀ 100 ▶
02. Brightness	◀ 45 ▶
03. Sharpness	◀ 75 ▶
04. Color	◀ 55 ▶
05. Tint	◀ 50 ▶

## 02.Initial Setting => 02.P-Mode Value => 02.Standard

02.Standard	Current Input Mode
01. Contrast	◀ 80 ▶
02. Brightness	◀ 50 ▶
03. Sharpness	◀ 50 ▶
04. Color	◀ 50 ▶
05. Tint	◀ 50 ▶

## 02.Initial Setting => 02.P-Mode Value => 03.Movie

03.Movie	Current Input Mode
01. Contrast	◀ 50 ▶
02. Brightness	◀ 55 ▶
03. Sharpness	◀ 25 ▶
04. Color	◀ 40 ▶
05. Tint	◀ 50 ▶

## 02.Initial Setting => 02.P-Mode Value => 04.Custom

04.Custom	Current Input Mode
01. Contrast	◀ 80 ▶
02. Brightness	◀ 50 ▶
03. Sharpness	◀ 50 ▶
04. Color	◀ 50 ▶
05. Tint	◀ 50 ▶

## 02.Initial Setting => 03.Initial Color Tone

02.Initial Setting	Current Input Mode
01. Cool2	
02. Cool1	
03. Normal	
04. Warm1	
05. Warm2	

- ♣ Available Settings for the PC Mode are Custom, Color Tone 1, Color Tone 2, Color Tone 3
- ♣ Available options for the DVI Mode are ColorTone1, ColorTone2, ColorTone3

**02.Initial Setting => 04.Color Tone Value**

04.Color Tone Value	Current Input Mode
01. Cool2	
02. Cool1	
03. Normal	
04. Warm1	
05. Warm2	

♣ Adjusting and Storing the Changes:  
Change the White Balance (Color Temperature)

1. Selecting an item will display the same options as those of White Balance.
2. Available options for the PC Mode are Custom, Color Tone 1, Color Tone 2, Color Tone 3
3. Available options for the DVI Mode are ColorTone1, ColorTone2, ColorTone3.
4. Data Storing is classified according to the PC Mode & Other Modes.

**03.PIP/TTX/Test Pattern**

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
03.PIP/Test Pattern	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.PIP R CONT	32	ASI510	32	32	32	32
02.PIP G CONT	32		32	32	32	32
03.PIP B CONT	32		32	32	32	32
04.PIP R BRIGHT	0		0	0	0	0
05.PIP G BRIGHT	0		0	0	0	0
06.PIP B BRIGHT	0		0	0	0	0
07.PIP FILTER LC	0		0	0	0	0
08.PIP FILTER ML	0		0	0	0	0
09.PIP FILTER MR	0		0	0	0	0
10.PIP FILTER UC	0		0	0	0	0
11. TTX CONT	0	SDA6001	0	0	0	0
12. TTX BRIGHTNESS	0		0	0	0	0
13.LOG PATTERN	0	Logic ASI510	0	0	0	0
14.LOG HIGH LEVEL	255		255	255	255	255
15.LOG LOW LEVEL	0		0	0	0	0
16.ASI COLORBAR	1		1	1	1	1

01~10 : ASI510

11~12 : SDA6001

13~16 : Logic, ASI510

**04.Option-1**

<b>04.Option-1</b>	<b>Current Input Mode</b>	
00. D4/V4	◀ D4 ▶	00. D4 => V4
01. SCART/RCA	SCART	01. SCART(Full Input) => RCA(Delete Scart)
02. CW/CS	CW	02. CW(EUROPE) => CS(SOUTHASIA)
03. TELE-WEB	OFF	03. Off => On
04. LANGUAGE GROUP	EUROPE	04. Europe => Asia
05. LANGUAGE	ENGLISH	05. English => 18 Languages(Europe)
06. ATM	ON	06. On => Off
07. Melody Volume	10	07. 0 ~ 20
08. Picture Mode	Dynamic	08. Dynamic => Standard
09. LNA Search	OFF	09. Off
10. CHILD LOCK	ON	10. On => Off
11. TOP TTX	ON	11. On => Off
12. TTX Group	Osd Language	12. Osd Language => 6 Group
13. HIGH DEVIATION	OFF	13. Off => On
14. SD Delay	3	14. O(default),1(27ms),2(54ms),3(108ms)
15. HD Delay	2	15. O(default),1(27ms),2(54ms),3(108ms)
16. Video Port	Graphic	16. Graphic <-> Video
17. DOC Write	OFF	17. OFF->ON
18. Initial Write	OFF	18. OFF->ON

00. D4/V4 : D4 <=> V4

- D4 : PS42D4S MODEL (DSUB JACK it is)
- V4 : PS42V4S MODEL (DSUB JACK nothing)

01. Scart/Rca : Scart => RCA

- Scart : Europe & Scart area(All Input is selected)
- RCA : Southeast Asia & RCA area(Delete Scart)

02. CW/CS : CW => CS

- CW : PAL, SECAM-B/G, D/K, I, L/L', NTSC4.43 = West Europe
- CS : PAL, SECAM-B/G, D/K, I, NTSC3.58/4.43 = Countries except West Europe.  
Ex) Southeast Asia, the Middle East, Russia, China, etc.

03. Tele-Web

- Off : TeleWeb non-broadcasting Country
- On : TeleWeb broadcasting Country

04. Language Group : Europe => Asia

- Europe : 18 languages
- Asia : 7 languages

05. Language : Select language

- Language Group is Europe : 18 languages  
(English=>Bulgarian=>Croatian=>Czechoslovak=>Netherlandish=>French=>German=>Greek=>Hungarian=>Italian=>Poland=>Portuguese=>Rumanian=>Russian=>Spanish=>Swedish=>Turki=>Yugoslave)
- Language Group is Asia : 5 languages  
(English=>French=>Chinese=>Arabic=>Persian)

06. ATM : On => Off

- ATM available region : On
- ATM non-available region : Off
- ATM at the time of OFF one from Function item the Country is changed with the Area and the ATM is changed with auto search.

07. Melody Volume  
 -. Able to adjust from 0 to 20.
08. Picture Mode : Dynamic <=>Standard
09. LNA Search  
 -. On : Using LNA, Auto Search  
 -. Off : Not in use LNA, Auto Search
10. Child Lock  
 -. On : TV Model  
 -. Off : Model has deletion of Child Lock function
11. Top TTX  
 -. On : Only Top broadcasting region set 'On'  
     Ex) Germany, Switzerland, etc  
 -. Off : Country except Top broadcasting region.
12. TTX Group : TTX Language Group and National Option Code  
 -. By language, Select at the factory option table.  
 -. TTX language will be displayed by National Option code.  
 -. TTX Language Group by each country : 6 Groups  
     West Europe => East Europe => Turkish/Greek => Cyrillic => Arabic/Hebrew => Farsi/Hebrew=>Osd Language
13. High Deviation : To prevent Sound Buzz resulting from regional conditions of the input signals.  
 -. Set to 'Off' for the standardized sound input signal, in the region such as Europe.  
 -. Set to 'On' for the over-modulated sound input signal, in the region such as Southeast Asia.
14. SD Delay : AV mode Delay  
     1.8ms delay       ----- delay0  
     27ms delay       ----- delay1  
     54ms delay       ----- delay2  
     108ms delay (max) ----- delay3
15. HD Delay : DTV/PC/DVI mode Delay
16. Video Port : Setting of Aurora Input Port for VIDEO signal  
 -. Graphic : Input Video Signal though Graphic port of Aurora (In case of NON-PIP VIDEO)  
 -. Video : Input Video Signal though Graphic port of Aurora (In case of PIP VIDEO)
17. DDC Write  
 -. Off : Disable to write DVI DDC (DDC Write Protection)  
 -. On : Able to write DVI DDC  
 \* In the initial stage of the Operational Inspection, DDC Write is enabled (DDC Write is ON).  
     DDC Write is disabled (DDC Write is OFF) after the Factory Reset.  
 \* To enable DDC Write at a later time, enter Factory Mode and set this menu to ON.
18. Initial Write

## 05.Option-2

### 05.Option-2

- 00. Pixel Shift
- 01. Shift Test
- 02. Pixel Number
- 03. Pixel Line
- 04. Shift Time
- 05. Number Range
- 06. Line Range
- 07. Temp Protection
- 08. DNle DEMO
- 09. PILOT HIGH
- 10. PILOT LOW
- 11. CHECKSUM

### Current Input Mode

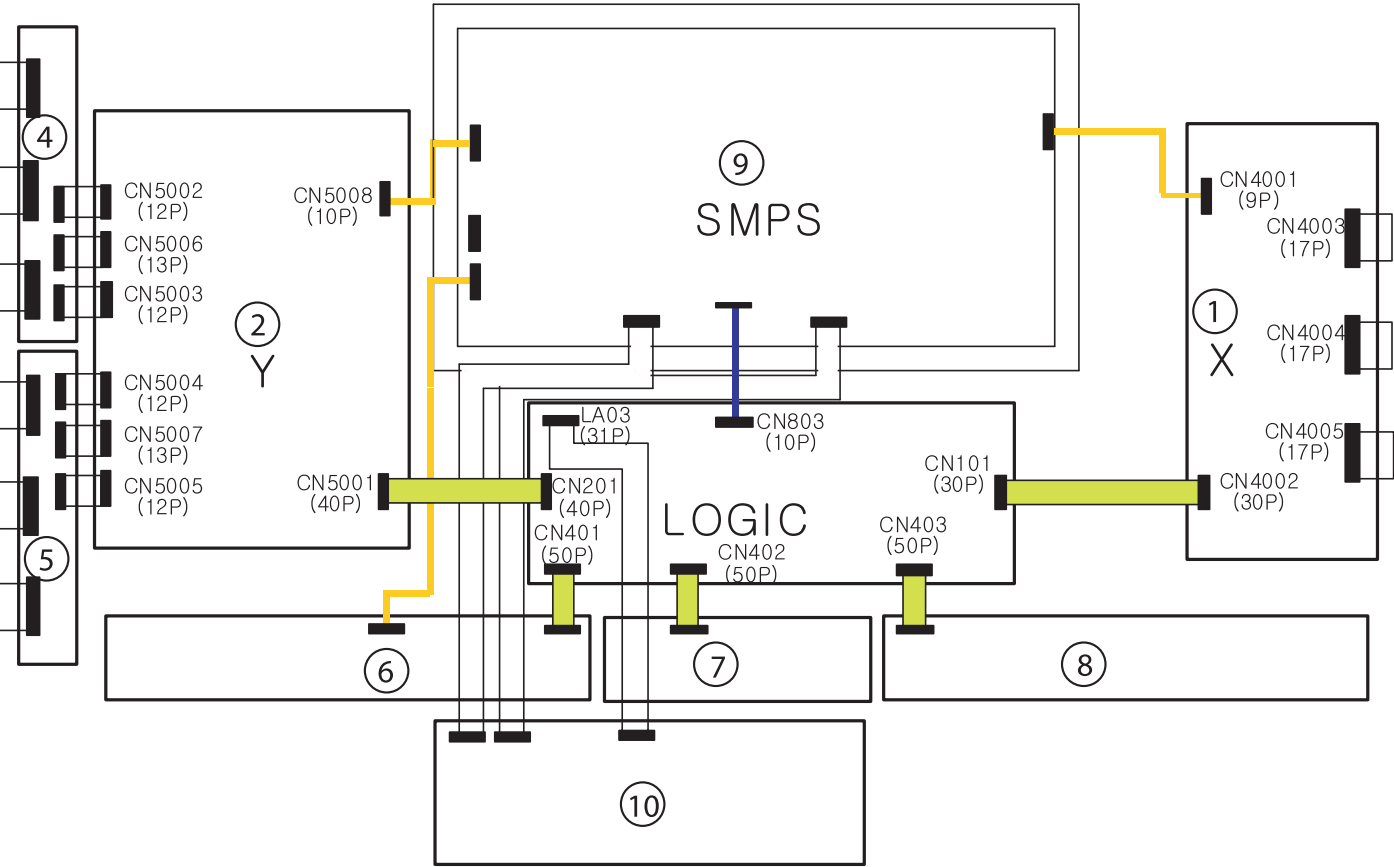
- ◀ V ▶
- ◀ 0 ▶
- ◀ 1 ▶
- ◀ 1 ▶
- ◀ 4 ▶
- ◀ 4 ▶
- ◀ 4 ▶
- ◀ On ▶
- ◀ On ▶
- ◀ 21 ▶
- ◀ 16 ▶
- ◀ 0000 ▶

- 00. Off => V => G => V/G
- 01. 0: minute , 1: SEC
- 02. Left,right movement Pixel
- 03. Upper, low movement Pixel
- 04. Shift Test

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M0003	BN96-01207B	ASSY COVER P-FRONT;42D4,XEC,HIPS,HB,BLK,	1
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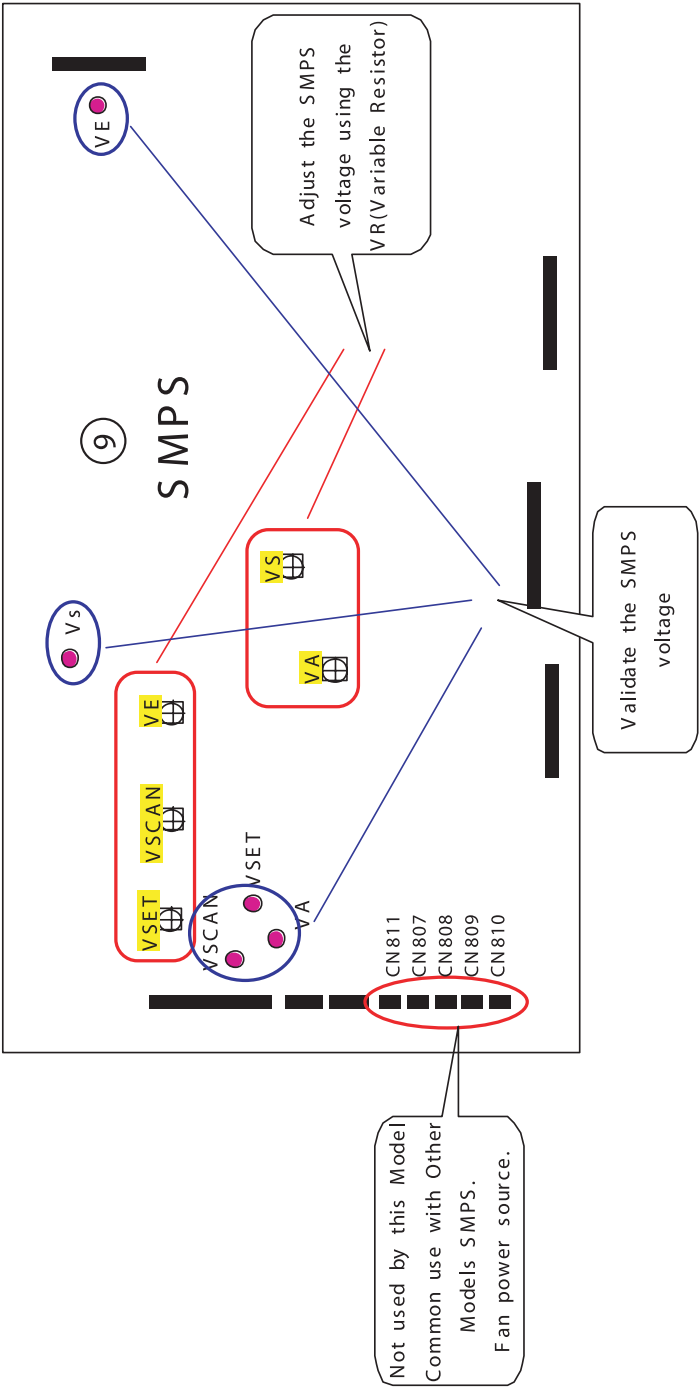
3-2 MODULE BLOCK



No	Description	Code No	Specification
-	ASSY PDP PANEL	BN96-01209A	M3,S42D-YD,V3,42INCH,SEMCO SMPS,D65A,V3.1
1	ASSY PCB X MAIN	BN96-00870A	M3,S42SD-YD,D65A,X MAIN BOARD,LJ92-00758A,V3
2	ASSY PCB Y MAIN	BN96-01211A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00944B
3	ASSY PCB LOGIC MAIN	BN96-01212A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00975C
4	ASSY PCB BUFFER(up)	BN96-00872A	M3,S42SD-YD,D65A, Y BUFFER(UP) LJ92-00796A,V3
5	ASSY PCB BUFFER(down)	BN96-00873A	M3,S42SD-YD,D65A, Y BUFFER LJ92-00797A,V3
6	ASSY PCB BUFFER(E)	BN96-01213A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00811A
7	ASSY PCB BUFFER(F)	BN96-01214A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00812A
8	ASSY PCB BUFFER(G)	BN96-01215A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00813A
9	ASSY PCB SMPS	BN96-01217A	SPP4231,PS42D4S,110~240V
10	ASSY PCB DIGITAL	BN94-00520A	PS42D4S,NELSON

Output	Va	Vsc	Vs	Ve	Vset
Voltage	See the labels attached on the base chassis				

● Test Point  
⊞ VR : Variable Resistor



+ Notes  
-. When the SMPS-PCB is replaced, the VA,VSCAN,Vs,VE and VSET voltages must be checked and adjusted to the proper to levels indicated on the panel sticker.



## 4. SERVICE ITEM

You can search for the updated part code through ITSELF web site.

URL : <http://itself.sec.samsung.co.kr>

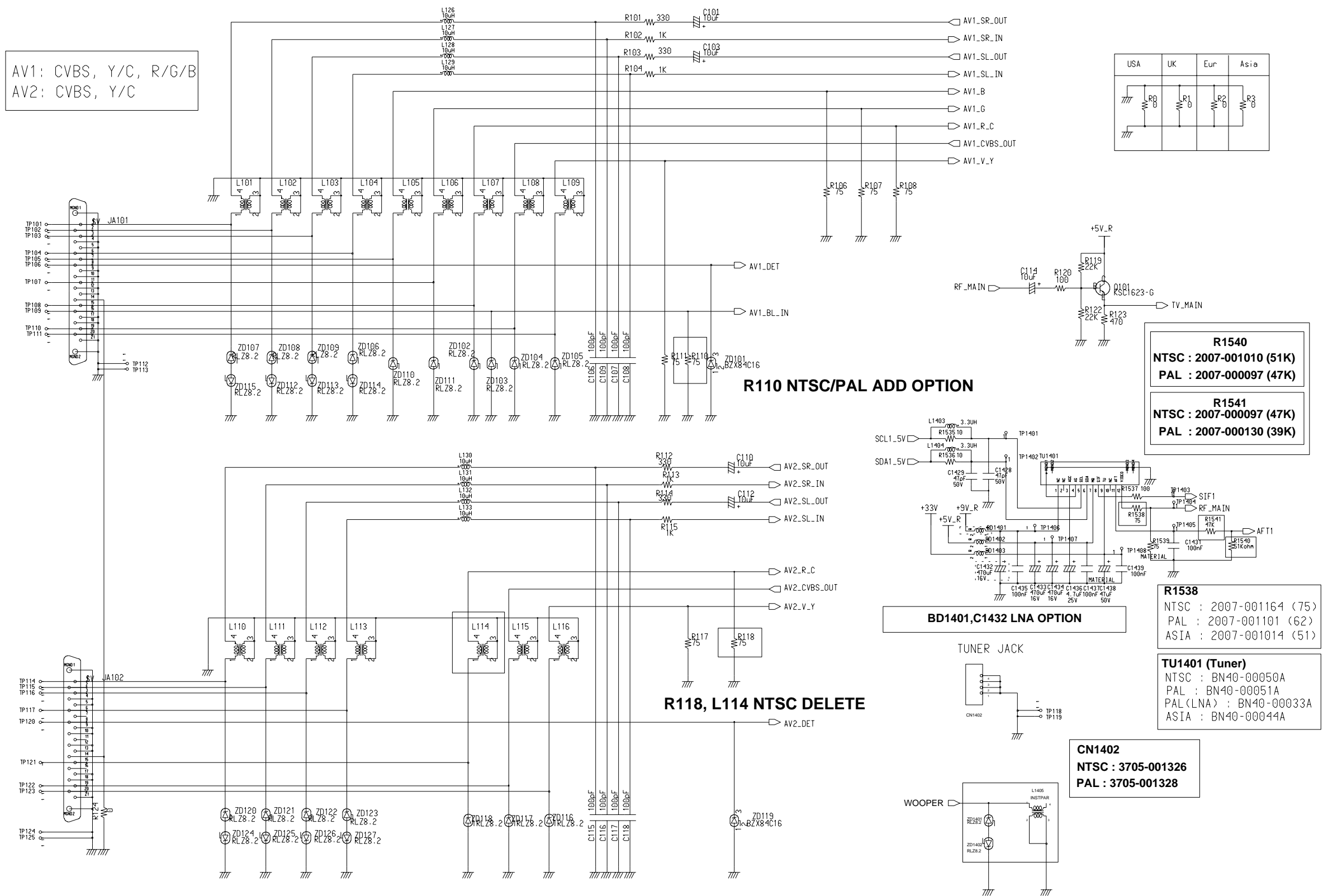
Loc.	Code No	Description;Specification	Q'ty	S.N.A
D0254	AA32-00013B	MODULE REMOCON;346HF5,38KHz,940mm,MESH,H	1	
T0568	AA39-30007A	CBF IF;- ,T,100mm,1365#26	1	
T0074	AA59-00328A	REMOCON; ,TM75,MUSE,36,G6148,EX,EUROP	1	
TU1401	BN40-00033A	TUNER;TMQZ6-421A,PDP-NELSON,PAL CIS,181C	1	
	BN94-00562A	ASSY PCB MISC-MAIN;PS42D4S,D65C,CIS,BN41	1	
T0001	BN96-00314B	ASSY COVER P-BACK;PS42P3S,AL5052 T1.2,DG	1	
T0073	BN96-00870A	ASSY PDP P-X MAIN BOARD;M3,S42SD-YD,D65A	1	
T0091	BN96-00872A	ASSY PDP P-Y BUFFER (UP);M3,S42SD-YD,D65	1	
T0092	BN96-00873A	ASSY PDP P-Y BUFFER (DOWN);M3,S42SD-YD,D	1	
M0003	BN96-01207B	ASSY COVER P-FRONT;42D4,XEC,HIPS,HB,BLK,	1	
T0144	BN96-01208A	ASSY COVER P-STAND BASE;42D4,AL5052,T1.2	1	
T0044	BN96-01209A	ASSY PDP P-MODULE;M3,S42SD-YD,V3,42INCH,	1	
T0096	BN96-01211A	ASSY PDP P-Y MAIN BOARD;M3,S42SD-YD,V3,4	1	
T0037	BN96-01212A	ASSY PDP P-L MAIN BOARD;M3,S42SD-YD,V3,4	1	
T0113	BN96-01213A	ASSY PDP P-E BUFFER BOARD;M3,S42SD-YD,V3	1	
T0114	BN96-01214A	ASSY PDP P-F BUFFER BOARD;M3,S42SD-YD,V3	1	
T0033	BN96-01215A	ASSY PDP P-G BUFFER BOARD;M3,S42SD-YD,V3	1	
T0764	BN96-01217A	ASSY MISC P-SMPS;SPP4231,PS42D4S,110~240	1	

# MEMO

## 5. Schematic Diagrams

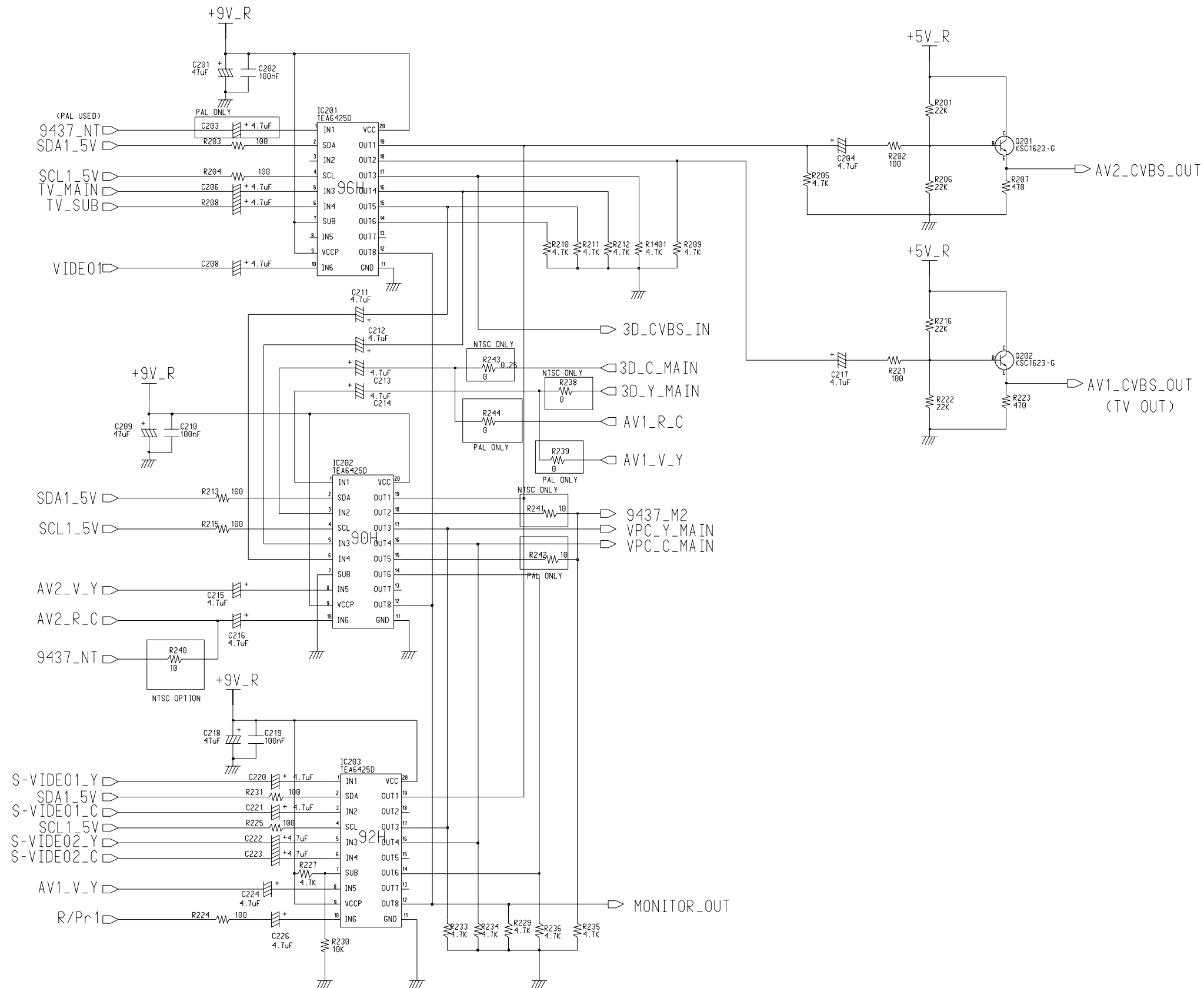
### 5-1 SCART

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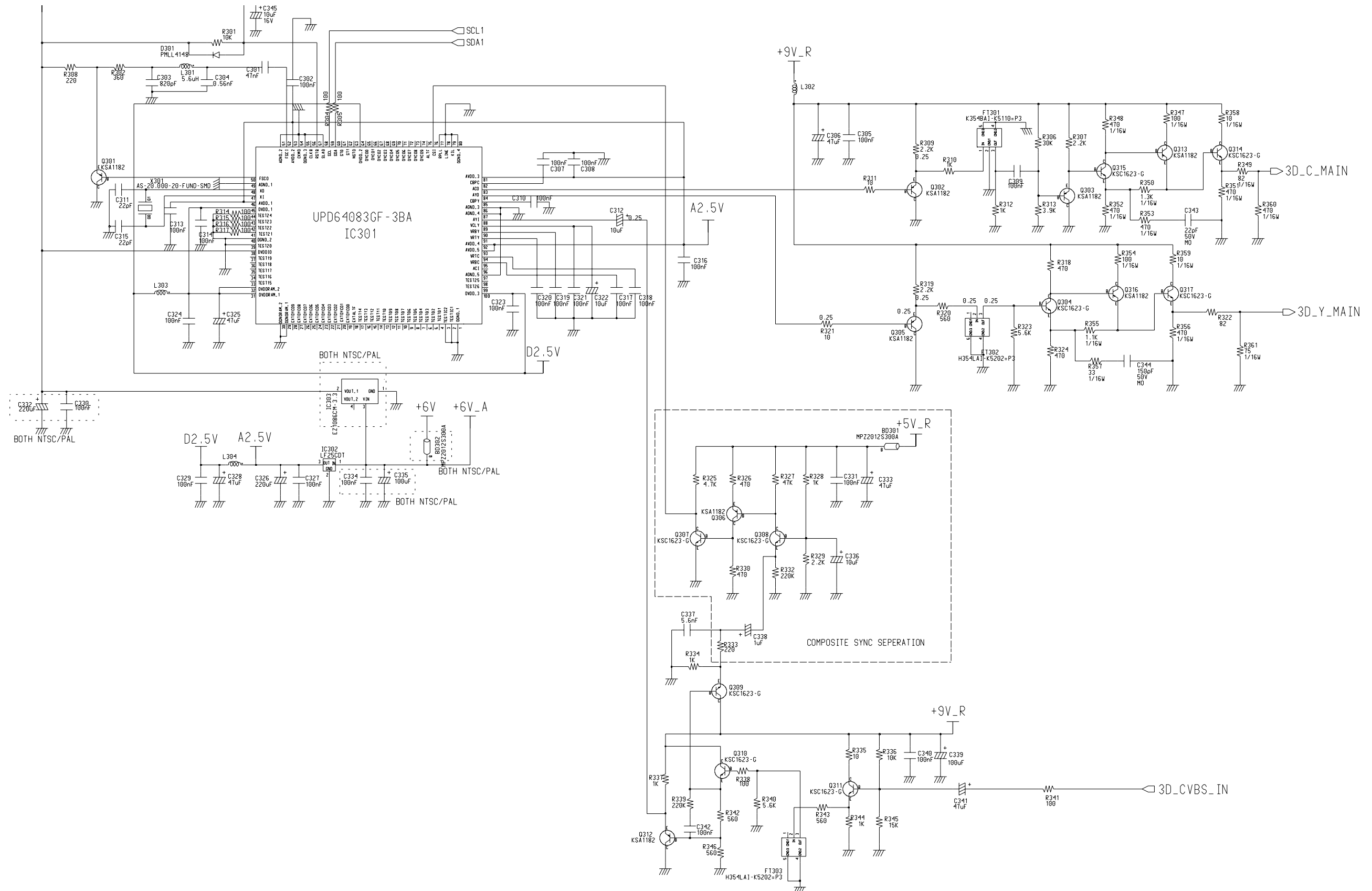
## 5-2 VIDEO SW

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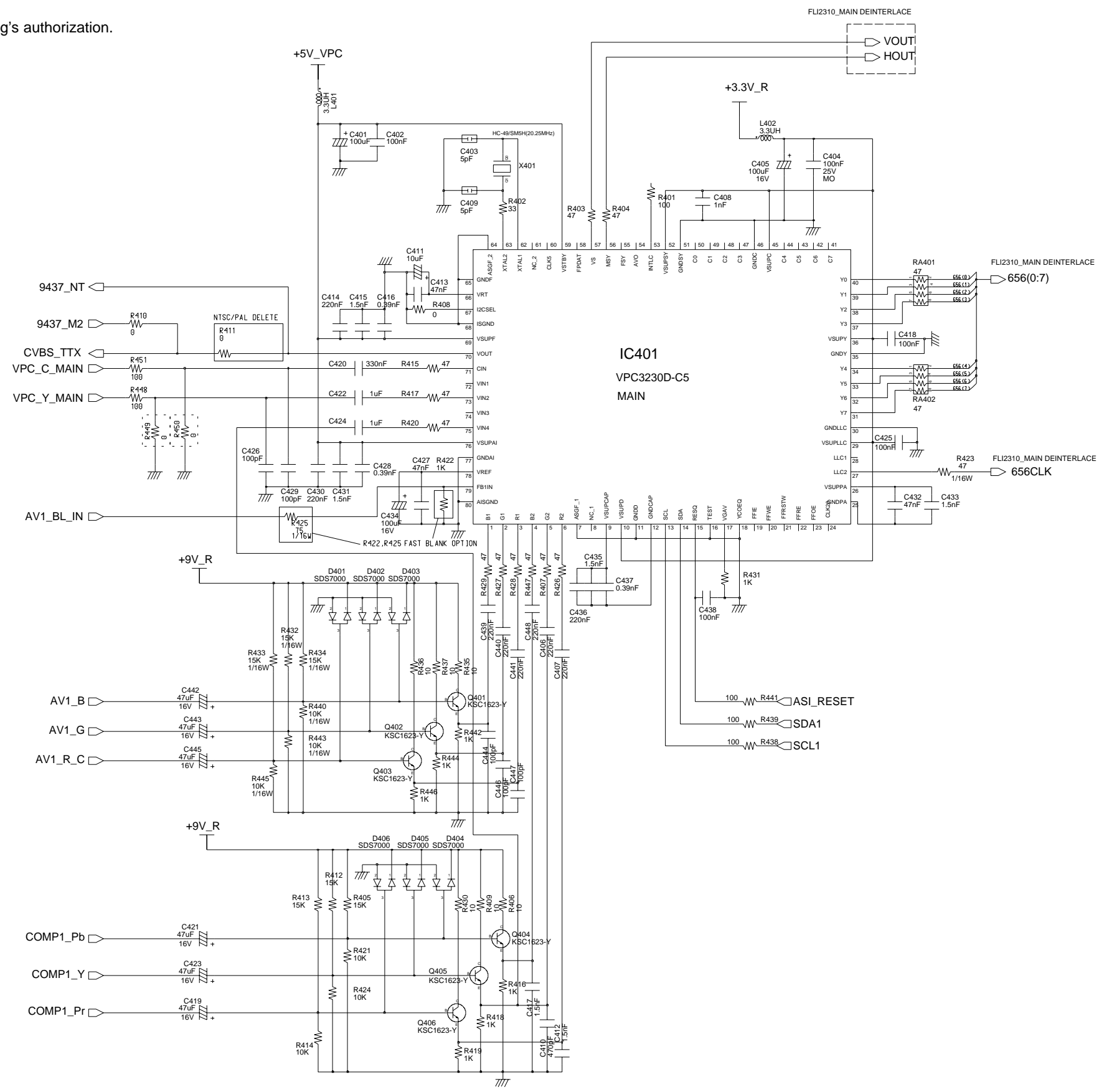
## 5-3 3D COMB

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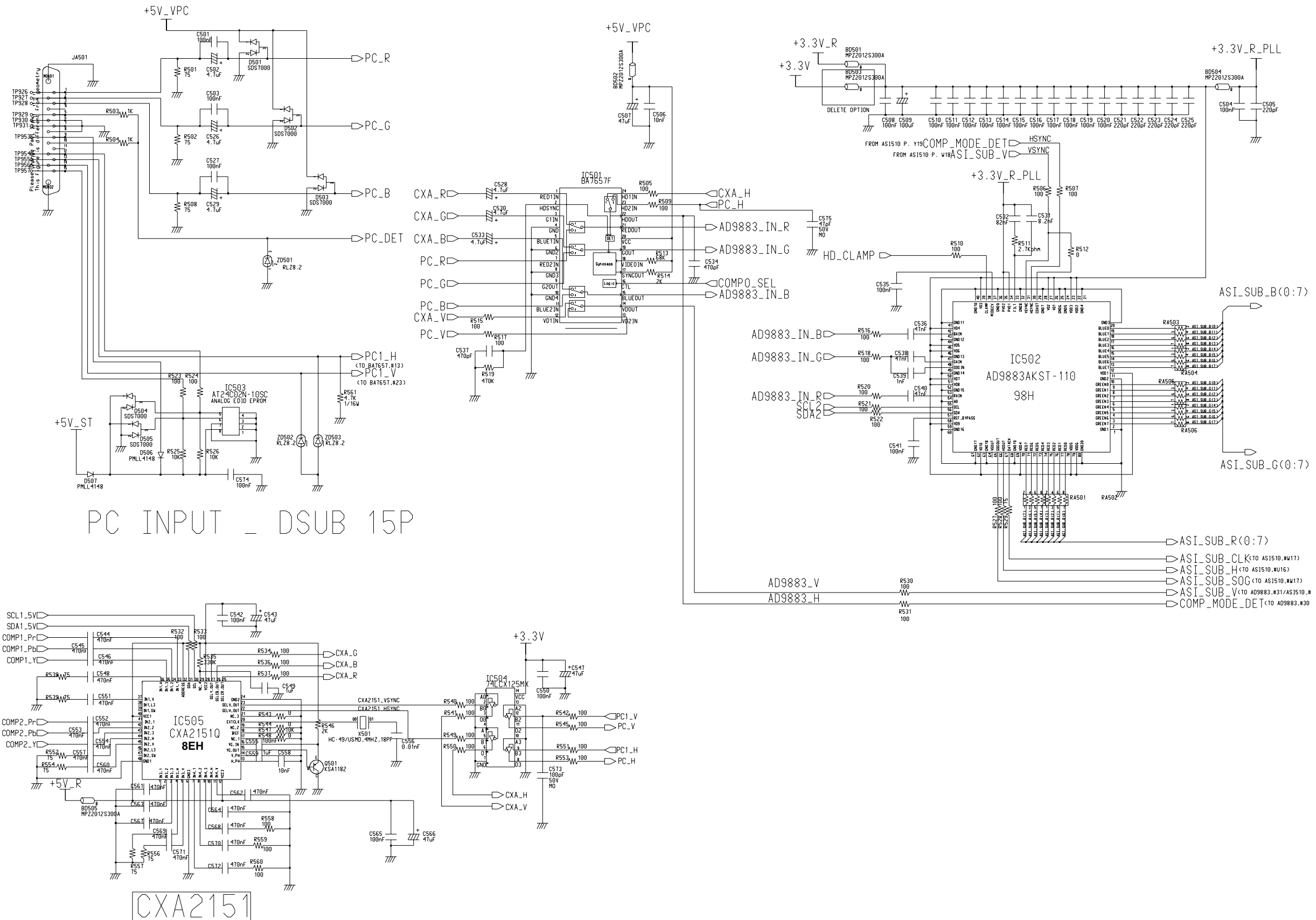
5-4 VPC3230

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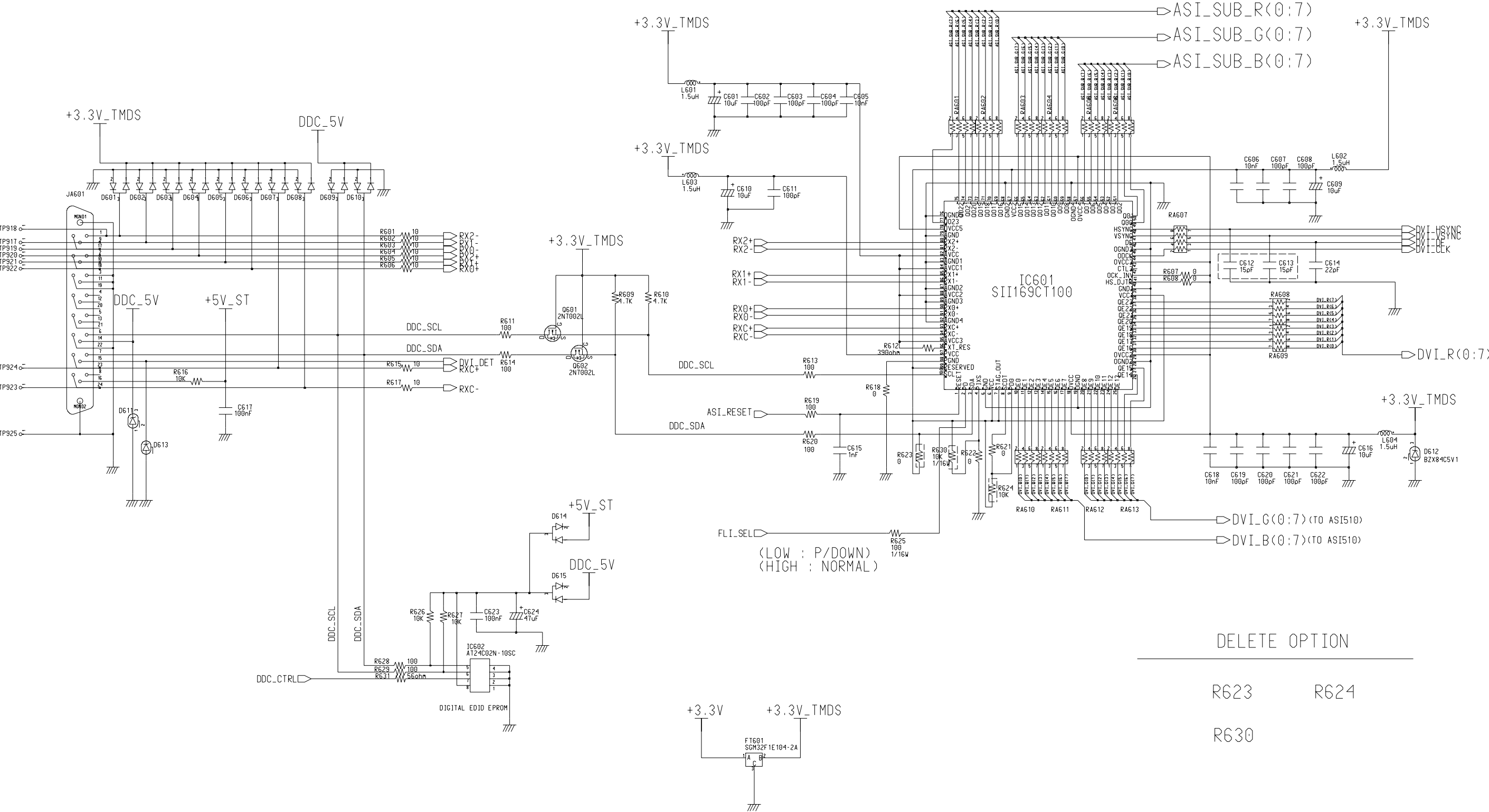
5-5 PCIN\_9883\_2151

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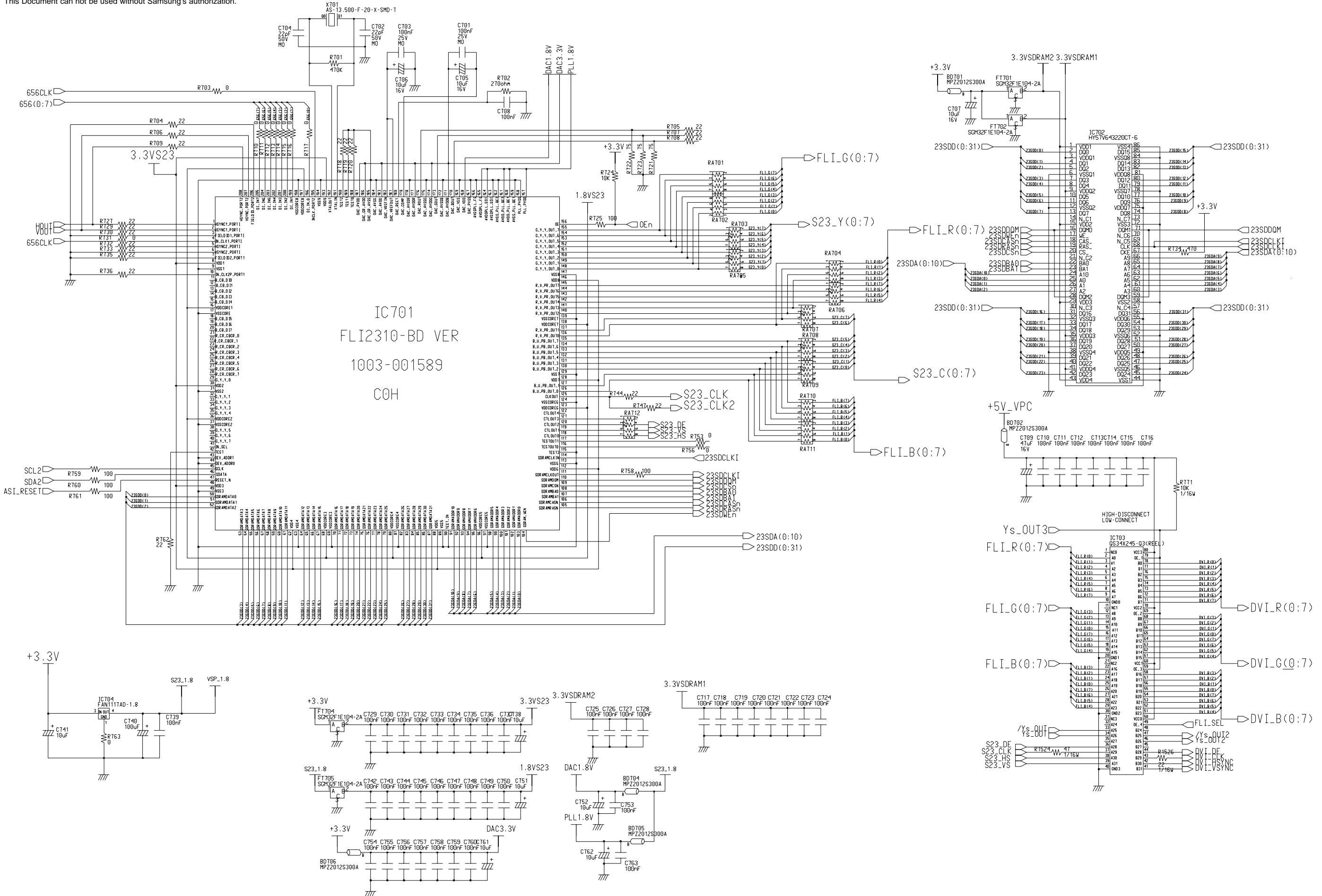
5-6 DVI\_SIL169

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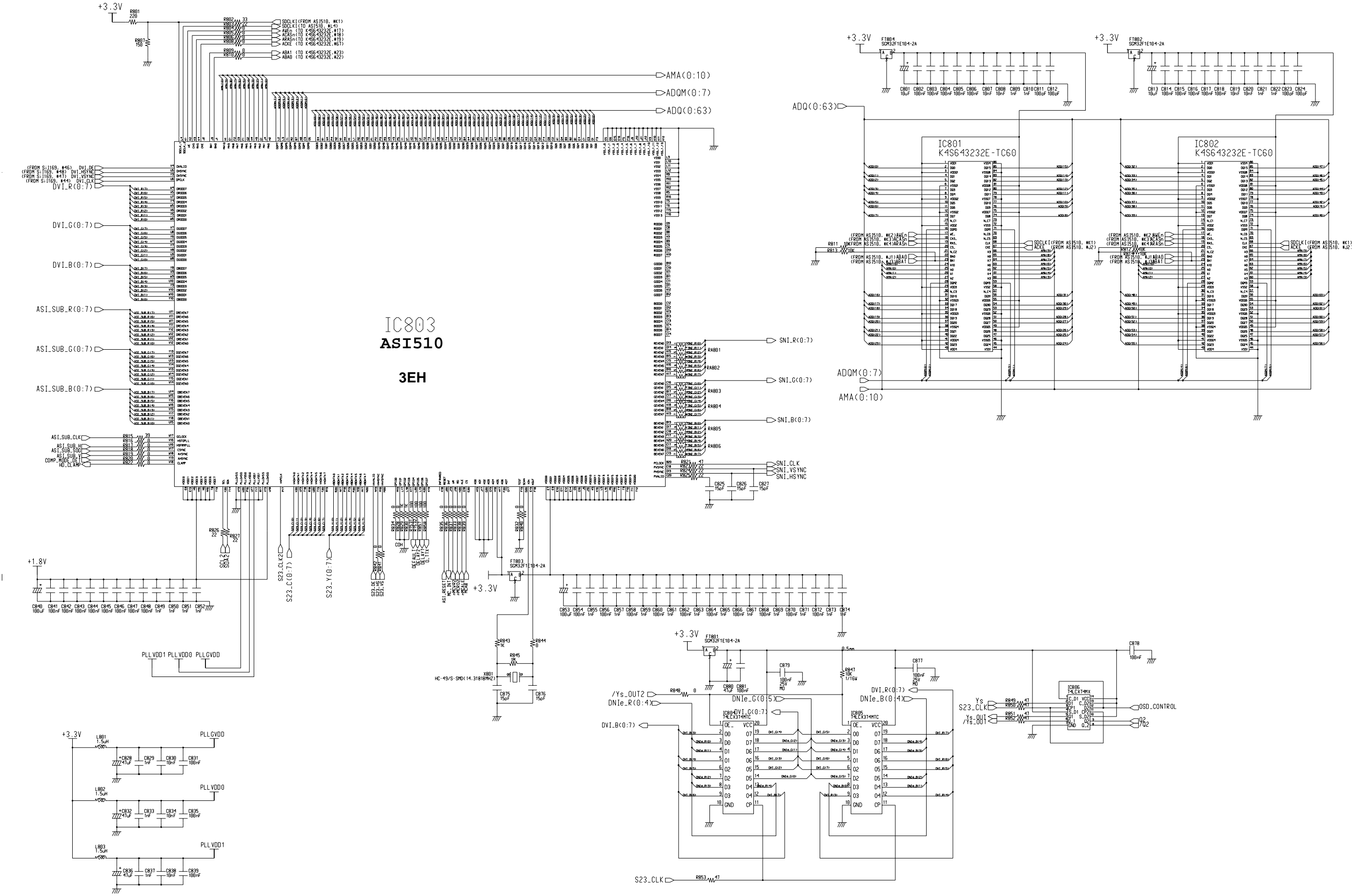


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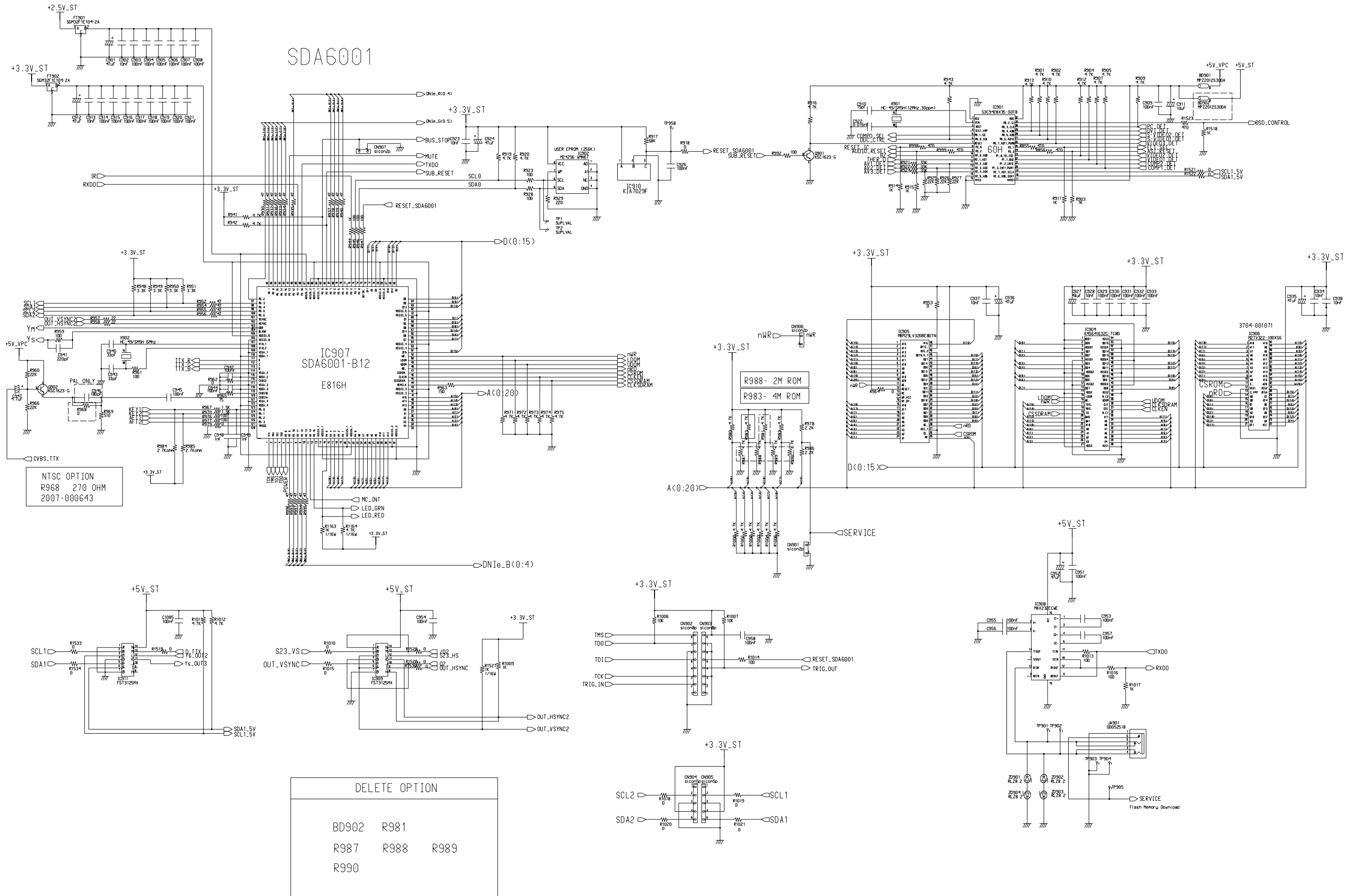


5-8 ASI510

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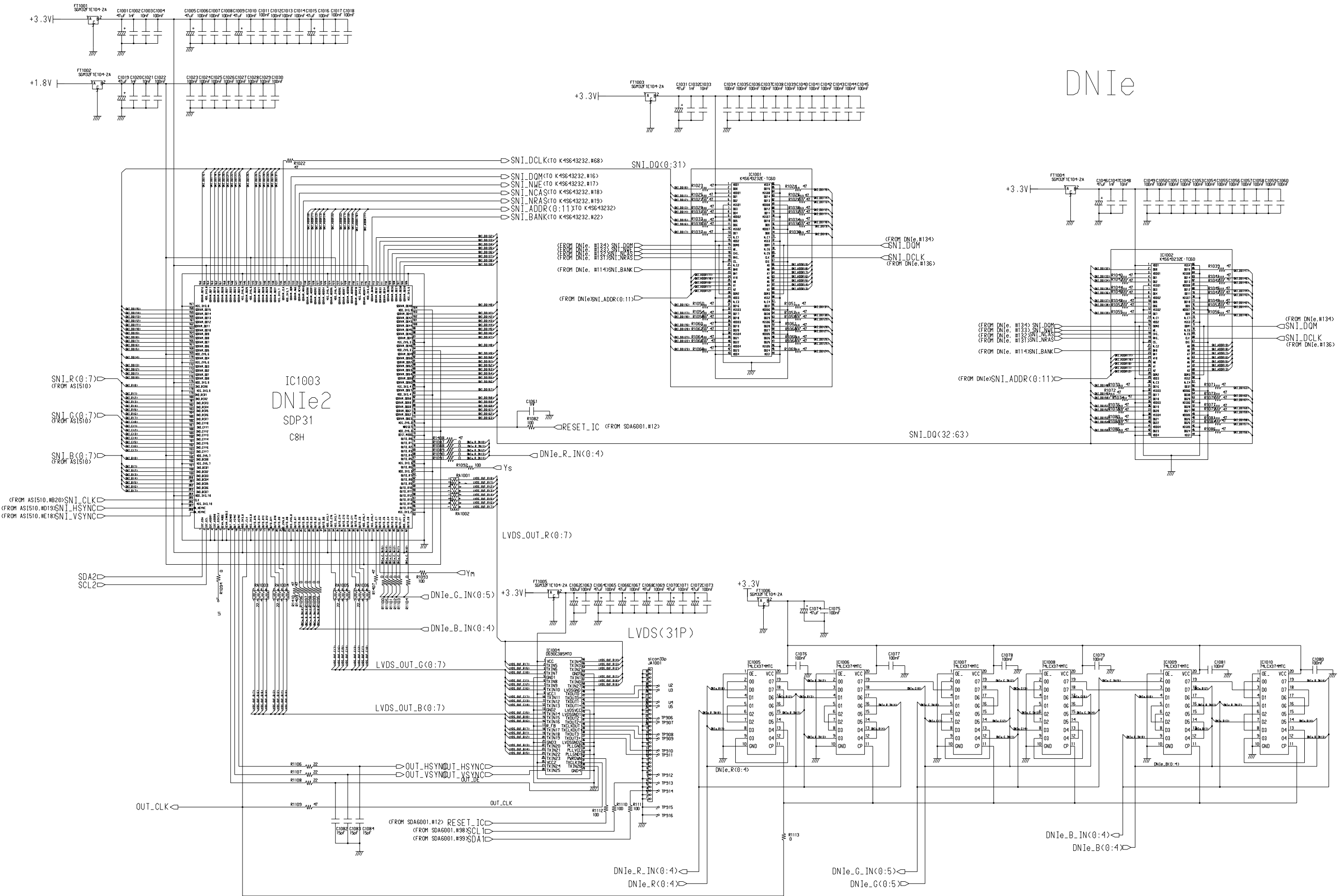


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5-10 DNIe2

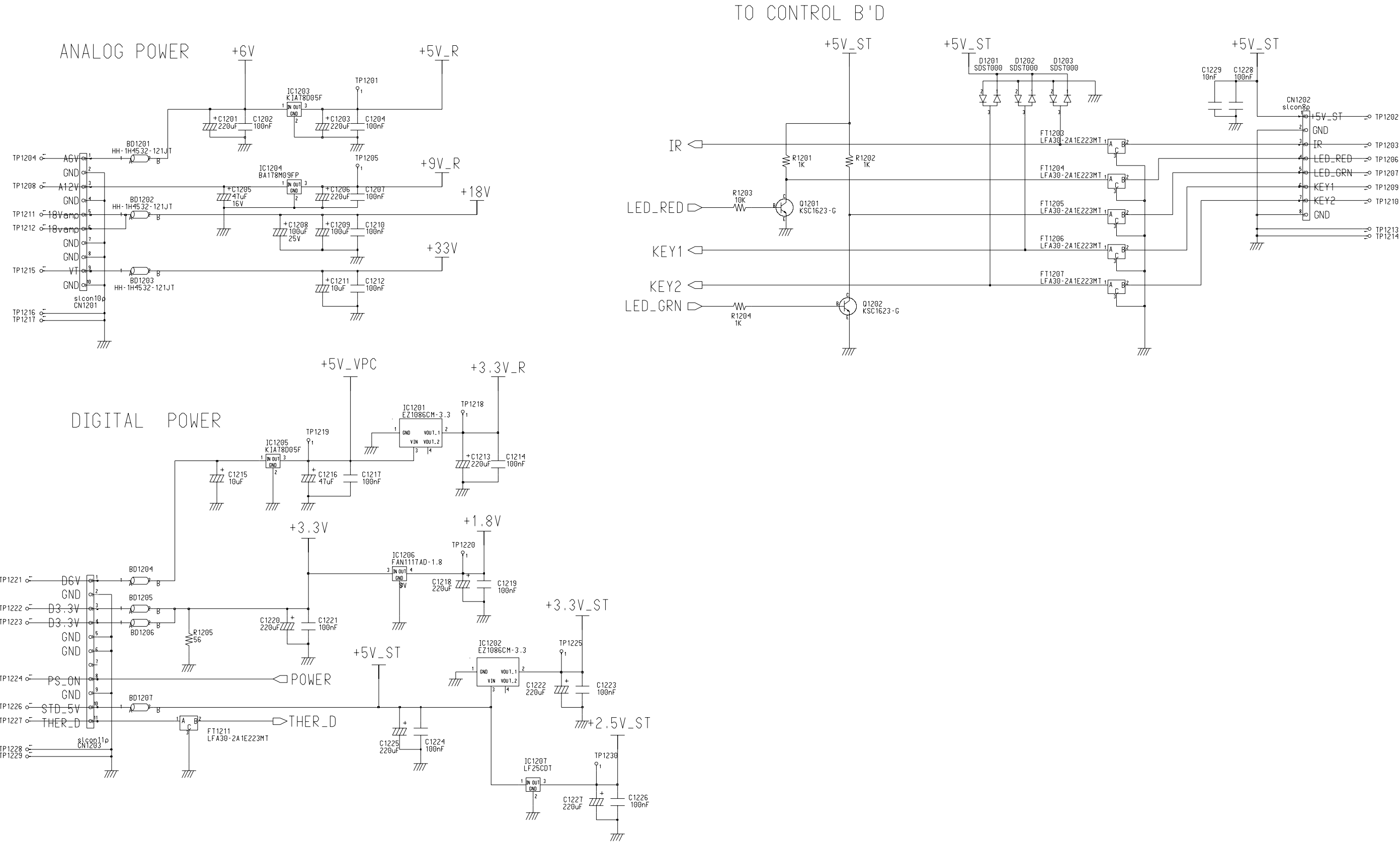
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5-12 POWER

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## 5-13 AUDIO

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